Chapter 4.5
A Case Study of an Integrated University Portal

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INTRODUCTION

The increasing complexity and interdependence of campus technology systems poses a significant challenge to universities. Such efforts cannot be solely the domain of a university technology department but requires participation across the institution in order to ensure success. As Irvine (2003) noted, “a decision about course management platforms or portals and their interoperability with other campus systems is a critical institution-wide issue that involves the whole university community” (p. 5). This case study considers the development of an Oracle-powered database-driven student and faculty information single-sign-on portal at Regent University called myRegent. This recently developed portal integrates with our existing student information and learning management systems, SCT Banner, and Blackboard Learning System respectively.

From its inception, Regent University has leveraged technology to allow students to participate in graduate education without limiting students to live in a particular geographical location during the course of their studies. Since 1989, the faculty have harnessed distance education technologies and corresponding instructional models to extend educational access beyond Southeastern Virginia. In the years since the first distance education courses were offered, Regent University’s off-campus programs have undergone the following technological progression:

- **1989**: Off-campus courses offered using audiotaped lectures on cassettes.
- **1995**: Implemented the PC-based TopClass software, which provided a secure online discussion forum to increase interactivity.
- **1997**: Implemented a Cold Fusion database-driven Web site, which increased capabilities and features for threaded discussions.
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- **1997**: Upgraded to the Web-based TopClass learning management system providing an online learning environment for distance courses.
- **1997**: Adopted Web textbooks published by Prentice Hall Business Publishing for use in online courses to reduce learner costs.
- **1999**: Adopted the Blackboard Learning Management System—marking Regent University as one of the first 100 schools to do so—and unifying all online programs into a single online learning environment.
- **2004**: Integrated HorizonWimba into the Blackboard system to add rich-media synchronous features into the online classroom.
- **2005-2006**: Rolled out myRegent portal across campus, providing a single-sign-in to an increased set of online educational features.

Regent University’s Information Technology Department also assisted in the design and development of a digital media database called ROMA (Regent Online Media Assets). Through a Web interface, our faculty can browse and download images, audio and video clips, and other learning materials through a central database. This rich media database server enables faculty to use and reuse these media assets or learning objects in their online and campus courses. This is consistent with Gilbert’s (2003) call for structured and searchable collections of instructional content to enable faculty to easily locate quality materials amid the electronic chaos.

Both the faculty and administrative staff of the university are adept at using technology to allow students to complete all of their studies off-campus. Most recently, the university has used video-teleconferencing and Web technologies to promote distance learning. Given the growing number of distance-learning students, a single portal allowing a student access to services regardless of geographic location is of particular importance to this university. Furthermore, such a portal will benefit on-campus students by simplifying and increasing access to relevant information and enabling campus students to access these materials during the academic years and summers.

### PORTAL PURPOSE AND DEVELOPMENT

Regent University maintains a university home page at http://www.regent.edu. This newly redesigned, Oracle database-driven Web site provides a convenient way for prospective students, current students, alumni and friends, faculty and staff to access administrative and departmental services. The Regent University home page averages more than 25,000 page views per day. In addition, students have access to the user-centered library portal with a customizable interface to collections of Internet resources, including over 100 separate online academic and professional databases, which are available 24/7 to faculty and students with Internet access. The university also provides the Blackboard Learning System (2006) for online and blended courses, as well as SCT Banner (2006) for our student information system. In short, our students, faculty, and staff currently use a variety of self-service portals ranging from admissions, course registration, tuition payment, review of pay slip information, and access to digital databases.

With all of these resources available to the university community, there is a serious problem of information overload, which prevents members from making effective use of the resources. Campus surveys have repeatedly demonstrated high levels of satisfaction with individual online resources but widely varying usage levels, which have led us to conclude that many quality resources are simply being overlooked (Baker, 2003). Accordingly, we proposed the development of a single-sign-on portal to enable us to better
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